

## REMARKS

In the June 26, 2007 Office Action, the Examiner noted that claims 4, 39 and 48 were pending in the application; rejected claims 4, 39 and 48 under 35 U.S.C. § 101; and rejected claims 4, 39 and 48 under 35 U.S.C. § 102(e). In rejecting the claims, Shimizu (U.S. Patent 6,005,936) was cited. Claims 4, 39 and 48 remain in the case. The rejections are traversed below.

Applicants assert that no new matter has been added. Support for the amendments can be found, for example, on page 32, line 9 to page 34, line 20 of the Specification.

### Rejection under 35 U.S.C. § 101

Claims 4, 39 and 48 were rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter.

Applicants have amended the claims to clarify that the "sub-file" contains "main-file authentication information." The authentication information is used to verify the file to be authenticated (i.e. a "main-file").

Claim 48 has been amended to recite a "A computer readable medium encoded with a recorded file management computer program, which when executed the computer program causes a computer to execute the method comprising..."

Claim 4 recites a "system" or apparatus comprising two storing units and a unit that creates information. Therefore, it is submitted that claim 4 is statutory as a *machine* under 35 U.S.C. § 101.

Claim 39 recites a "method" that includes "storing the main-file authentication information in at least one sub-file in a secure area." Accordingly, claim 39 produces a useful, concrete and tangible result (producing authentication information) which involves a physical transformation (storing of a sub-file). Therefore, for at least the above-mentioned reasons, claim 39 is statutory as a *process* under 35 U.S.C. § 101.

In addition, since claim 48 recites a "computer-readable medium encoded with a program" that causes a computer to execute the method recited in claim 39, claim 48 is patentable as an article of *manufacture* under 35 U.S.C. § 101.

Accordingly, applicants submit that the claims are statutory under 35 U.S.C. § 101 and applicants respectfully request the rejection be withdrawn.

### Rejections under 35 U.S.C. § 102(e)

Claims 4, 39 and 48 were rejected under 35 U.S.C. § 102(e) as being anticipated by Shimizu (U.S. Patent 6,005,936). This rejection is respectfully traversed.

Claim 4 as amended, recites "a main-file storing unit **storing a main-file in a non-secure area** ... and a sub-file storing unit storing the main-file authentication information in at least one **sub-file in a secure area**" (claim 4, emphasis added). Shimizu fails to describe distinguishing between a "main-file" and a "sub-file" and fails to describe storing these files in "secure" and "non-secure" areas.

Shimizu relates to a system for embedding authentication information into a digital photograph. Shimizu encrypts hash values of the image to be verified and authentication information of the image. When decrypted, the hash values are compared to determine authenticity of the image. Shimizu utilizes a public/private key method to handle the encryption/decryption process.

More specifically, Shimizu recites the following process for authentication:

To determine whether image data is the same as the original image data... the following kinds of information are required.

- (1) Image data
- (2) Authentication information (attached to the image data as a separate file)
- (3) Public key PK corresponding to the secret key (separately acquired from a person in authority)

To detect alterations, a hash value  $H_1$  of the image data to be subjected to alteration detection is calculated. Then, a hash value  $H_2$  is identified from the authentication information in the attached file. Since the authentication information is obtained by encrypting the hash value  $H$  of the original image D by the secret key SK (hash value  $H'$ ), the hash value  $H_2$  cannot be identified by the authentication information itself. Thus, the public key PK is acquired from a person in authority who is keeping the public key PK corresponding to the secret key SK, and the authentication information is decoded based on this. Then, the obtained hash value  $H_2$  is compared with the calculated hash value  $H_1$ ...

Accordingly, if the hash values are the same, it is determined that the identity is detected; otherwise it is determined that there has been an alteration.

(col. 1, line 58 to col. 2, line 19).

As described above, Shimizu merely describes storing the authentication information in a separate file. Shimizu, however, is silent on storing the authentication information in a secure area. Accordingly, Shimizu fails to recognize an added security feature. By storing the authentication information in a secure area, an attempt to maliciously delete or alter the file is prevented. This added security feature is not recognized by Shimizu. Accordingly, Shimizu fails to describe "storing the main-file authentication information in at least one sub-file in a secure

"area" as recited by claim 4. Accordingly, claim 4 patentably distinguishes over the cited art for at least the above-mentioned reasons.

Claim 39 recites "storing a main-file in a non-secure area ... and storing the main-file authentication information in at least one sub-file in a secure area" and claim 48 recites "storing a main-file in a non-secure area ... and storing the main-file authentication information in at least one sub-file in a secure area." Therefore, claims 39 and 48 patentably distinguish over the cited art.

Accordingly, applicants respectfully request the rejection under 35 U.S.C. § 102(e) be withdrawn.

### Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: 9/26/07

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